

**REMARKS**

Please reconsider the present application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering the present application.

**Disposition of Claims**

Claims 1-20 are currently pending in the present application. Claims 1, 9, and 17 are independent. The remaining claims depend, directly or indirectly, from claims 1, 9, and 17. By way of this reply, claims 1, 2, 9, 17-20 have been amended.

**Specification Amendments**

The third paragraph on page 9 of the Specification has been amended for clarification, and to correct typographical errors. No new matter has been added by way of this amendment as support for this amendment may be found, for example, in Figure 4 and the associated text in the application.

**Claim Amendments**

Claims 1, 9, and 17 have been amended to clarify that, an attribute of the latest CRL, wherein the "latest" is determined by whether changes have been made to the list of the CRL, is stored as a part of a CRL. No new matter has been added by way of these amendments as support for these amendments may be found, for example, in Figures 4 and 5 and the associated text in the application.

Claims 2 and 20 have been amended to remove redundant phrases and to replace the term "identity" with the term "attribute". No new matter has been added by way of these

amendments as support for these amendments may be found, for example, in page 8, lines 20—21 of the Specification in the present application.

Claims 17-20 have been amended to clarify that what is claimed is a computer readable medium containing a data structure. No new matter has been added by way of these amendments as support for these amendments may be found, for example, in Figure 6 and the associated text in the application.

### **Rejections under 35 U.S.C § 101**

#### Claims 17-20

Claims 17-20 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Claims 17-20 have been amended to claim a computer readable medium containing a data structure. To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

The amended claims put the claimed invention in the tangible form, that is, a computer readable medium or an electronic communication medium containing novel data structure. As amended independent claim 17 is statutory under 35 U.S.C. § 101, dependent claims 18-20 are statutory for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

### **Rejections under 35 U.S.C § 102**

#### Claims 1, 4, and 6-19

Claims 1, 4, and 6-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Perlman *et al.*, U.S. Patent No. 5,687,235 A. For the reasons set forth below, this rejection is respectfully traversed.

Amended independent claim 1 recites a method of creating a digital certificate revocation list (CRL), including identifying a latest CRL in which changes have been made to the list, and storing an attribute indicating the CRL as being the latest as a part of the latest CRL. In particular, the present invention uses an extension to the standard CRL format to introduce a field (*i.e.*, an attribute) “last\_changed” to indicate if a CRL is the latest. With reference to the exemplary embodiment of the present invention shown in Figure 4 of the present application, at **404** a # “N” identifying a specific CRL and an attribute “last\_changed” stored in the CRL are both initialized to a value of 1. A timer is used merely to evaluate whether it is time to generate a “new” CRL with a # “N”, wherein the “N” value has been incremented by 1 at **416**. At **430**, a “new” CRL with a # “N” is compared with a previous CRL with a # “N-1”. If there is any change in the list, the value of the field (attribute) “last\_changed” in the “new”, #N CRL is updated to also have the value “N”. Hence, whether a newly received CRL (or portion of it containing the field “last\_changed”) is the “latest”, wherein the “latest” is defined as having a change in the list of the newly received CRL compared to a previous CRL, can be easily determined by looking at the “last\_changed” value in the “new” CRL and compare it with the # of the previous CRL as shown in Figure 5 of the present application. A CRL is processed at **232** only if it is the “latest” CRL regardless of if it is newly generated.

Perlman *et al.*, on the other hand, fails to disclose at least the limitations of amended independent claim 1 of the present application discussed above. In particular, Perlman *et al.* discloses an “optimal” CRL based upon the maximum CRL size as well as the size and expected updated time of the current CRL (column 8, lines 15—17). The concept of “optimal” CRL in Perlman *et al.* is completely different from the concept of “latest” CRL in accordance with the present invention. For example, even if a CRL is not updated, as long as it is less than or equal

to the maximum CRL size, it is still considered “optimal” and will be processed as disclosed in Perlman *et al.* (column 8, lines 18—21). Furthermore, a CRL as disclosed in Perlman *et al.* does *not* have a field “last\_changed” to identify whether it has been updated. Rather, a revocation service as disclosed in Perlman *et al.* generates an “incremental” CRL as the “optimal” CRL based on the size of the CRL, as well as the timestamp date (column 8, lines 56—64). While the timer used in accordance with embodiments of the present invention merely serves to determine if it is time to generate a “new” CRL that may or may not be the “latest” CRL, the timestamp disclosed in Perlman *et al.* is used to indicate whether the CRL is “optimal”. Thus, Perlman *et al.* fails to disclose at least identifying a latest CRL in which changes have been made to the list, and storing an attribute of the latest CRL as part of the latest CRL.

With respect to amended independent claim 9, similar to the above discussion, Perlman *et al.* fails to disclose at least a second CRL having a second attribute for indicating whether the second CRL is the latest CRL, wherein the term “latest” is defined as changes have been made to the list of digital certificates in the second CRL compared to the list of digital certificates in the first CRL, and that the second CRL is processed only if it is the latest CRL.

With respect to amended independent claim 17, similar to the above discussion, Perlman *et al.* fails to disclose at least an attribute for indicating whether a CRL is the “latest” CRL, wherein the term “latest” is defined as changes have been made to the list of digital certificates in the CRL, wherein the attribute is a part of the data structure in accordance with embodiments in the present invention.

In view of the above, Perlman *et al.* fails to show or suggest the present invention as recited in amended independent claims 1, 9, and 17 of the present application. Thus, amended independent claims 1, 9, and 17 of the present application are patentable over Perlman *et al.*

Dependent claims 4, 6-8, 10-16, and 18-19 are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1, 3, and 5-7

Claims 1, 3, and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Curry *et al.*, U.S. Patent No. 6,128,740 A. For the reasons set forth below, this rejection is respectfully traversed.

Curry *et al.* discloses a computer network security system providing generation of a CRL upon each revocation. Like Perlman *et al.*, Curry *et al.* fails to disclose all the limitations of amended independent claim 1 of the present application. In particular, Curry *et al.* fails to disclose at least storing an attribute of the latest CRL as a part of the latest CRL. For example, Curry *et al.* discloses publishing a CRL, on demand, when a new certificate is revoked (column 7, lines 26—28). A CRL is verified for its validity period (column 7, lines 14—16; Figure 4B, block 122), but does not include an attribute such as “last\_changed”, which is a part of the CRL and indicates whether the CRL is the latest as in accordance with embodiments of the present invention.

In view of the above, Curry *et al.* fails to show or suggest the present invention, as recited in amended independent claim 1 of the present application. Thus, amended independent claim 1 of the present application is patentable over Curry *et al.* Dependent claims 1, 3, and 5-7 are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

**Rejection(s) Under 35 U.S.C § 103****Claim 2**

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Perlman *et al.*, U.S. Patent No. 5,687,235 A or Curry *et al.*, U.S. Patent No. 6,128,740 A, as applied to claim 1 above, and further in view of Nazif *et al.*, U.S. Patent No. 5,481,601 A. For the reasons set forth below, this rejection is respectfully traversed.

As discussed above, Perlman *et al.* or Curry *et al.* fails to disclose all the limitations of amended independent claim 1 of the present application. Nazif *et al.* discloses a system for creating, transferring, and monitoring services in a telecommunication system including a service creation and management application and a service execution application. Like Perlman *et al.* or Curry *et al.*, Nazif *et al.* fails to disclose all the limitations of amended independent claim 1 of the present application or supply that which Perlman *et al.* or Curry *et al.* lacks.

In view of the above, Perlman *et al.* or Curry *et al.* and Nazif *et al.*, whether considered separately or in combination, fail to show or suggest the present invention as recited in amended independent claim 1 of the present application. Thus, amended independent claim 1 of the present application is patentable over Perlman *et al.* or Curry *et al.* and Nazif *et al.*. Dependent claim 2 is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

**Claim 20**

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman *et al.*, U.S. Patent No. 5,687,235 A as applied to claim 17 above, and further in view of Nazif *et al.*, U.S. Patent No. 5,481,601 A.

As discussed above, Perlman *et al.* fails to disclose all the limitations of amended independent claim 17 of the present application. Like Perlman *et al.*, Nazif *et al.* fails to disclose all the limitations of amended independent claim 17 of the present application or supply that which Perlman *et al.* lacks.

In view of the above, Perlman *et al.* and Nazif *et al.*, whether considered separately or in combination, fail to show or suggest the present invention as recited in amended independent claim 17 of the present application. Thus, amended independent claim 17 of the present application is patentable over Perlman *et al.* and Nazif *et al.* Dependent claim 20 is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

### **Conclusion**

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03226/535001).

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Respectfully submitted,

By 

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### **Attachments**